

**DEPARTMENT OF TRANSPORTATION****DIVISION OF ENGINEERING SERVICES**

Office of Structural Materials

Quality Assurance and Source Inspection



Bay Area Branch

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Contract #: 04-0120F4Cty: SF/Ala Rte: 80 PM: 13.2/13.9File #: 69.28**WELDING INSPECTION REPORT****Resident Engineer:** Siegenthaler, Peter**Address:** 333 Burma Road**City:** Oakland, CA 94607**Report No:** WIR-016943**Date Inspected:** 14-Sep-2010**Project Name:** SAS Superstructure**OSM Arrival Time:** 1900**Prime Contractor:** American Bridge/Fluor Enterprises, a JV**OSM Departure Time:** 700**Contractor:** Zhenhua Port Machinery Company, Ltd (ZPMC), Changxing Island **Location:** Shanghai, China**CWI Name:** See below**CWI Present:** Yes No**Inspected CWI report:** Yes No N/A**Rod Oven in Use:** Yes No N/A**Electrode to specification:** Yes No N/A**Weld Procedures Followed:** Yes No N/A**Qualified Welders:** Yes No N/A**Verified Joint Fit-up:** Yes No N/A**Approved Drawings:** Yes No N/A**Approved WPS:** Yes No N/A**Delayed / Cancelled:** Yes No N/A**Bridge No:** 34-0006**Component:** Tower and OBG Components**Summary of Items Observed:**

On this date Caltrans OSM Quality Assurance Inspector (QA Inspector) George Goulet was present during the times noted above for observations relative to the work being performed.

Bay 10

This QA Inspector randomly observed the following work in progress in Bay 10:

SMAW tack welding during fit-up of weld joints BP3094-001-92~99 located on PCMK OBG bottom plate to I stiffeners. Welder was identified as 057242. QC was identified as ZPMC CWI Xu Le Feng (QC1). Assisting QC1 at this location and appearing to be monitoring the welding and recording data was ZPMC Li Jun (QCA1), who was not a CWI. Welding variables recorded by QCA1 appeared to comply with WPS-B-P-2112.

FCAW welding of temporary stiffener beams to side A of PCMK OBG segment 13AW, bottom plate. Welders were identified as 202122, 047866. QC was identified as QC1. Assisting QC1 at this location and appearing to be monitoring the welding and recording data was QCA1, who was not a CWI. Welding variables were not recorded by QCA1. Upon limited observation, the weld joints did not appear, to this QA Inspector, to be at or above the minimum preheat and interpass temperature. QCA1 assured this QA Inspector that he was checking the preheat and interpass temperatures and they were always within tolerances of WPS-B-T-2132. A 200T+200T overhead crane was rigged to one end of the bottom plate, but also upon limited observation, this QA Inspector did not observe any lifting of the bottom plate. See photo below.

SMAW repair welding of the bottom of weld joint SSD1-TL5-1B-F-53 located on PCMK south tower, lift 5,

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internal connection plate to skin E. Welder was identified as 050289. QC was identified as ZPMC QC1. Assisting QC1 at this location and appearing to be monitoring the welding and recording data was ZPMC QC Deng Zhi Bing(QCA2), who was not a CWI. Welding variables recorded by QCA2 appeared to comply with WPS-485-SMAW-4G(4F)-repair.

### Heavy Dock

This QA Inspector randomly observed the following work on the Heavy Dock:

No apparent welding related work was being performed on the Heavy Dock. All 4 towers' lift 3 were connected and positioned vertically on a base pedestal at end of the Heavy Dock. East and south towers, lift 4 were positioned on top of east and south towers, lift 3, respectively, on the Heavy Dock, near the end where the ship was moored. All 4 towers' lift 2 were positioned horizontally on the deck of the ship at the end of the Heavy Dock.

OBG9W was positioned on top of OBG 9E on the deck of the ship. CB11 and CB12 were also positioned on the deck of the the ship.

Unless otherwise noted, all work observed on this date appeared to generally comply with applicable contract documents.



### Summary of Conversations:

As noted above.

### Comments

This report is for the purpose of determining conformance with the contract documents and is not for the purpose of making repair or fit for purpose recommendations. Should you require recommendations concerning repairs or remedial efforts please contact Micheal Ng, 159-2184-5703, who represents the Office of Structural Materials for your project.

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<b>Inspected By:</b>	Goulet, George	Quality Assurance Inspector
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<b>Reviewed By:</b>	Clifford, William	QA Reviewer
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